



## SEQUENCE LISTING

<110> KAPELLER-LIBERMANN, Rosana  
BANDARU, Rajasekhar

<120> 69087, 15821, and 15418, Methods and Compositions of Human Proteins and  
Uses Thereof

<130> 10147-52U1

<140> 10/044,205

<141> 2001-10-22

<150> US 60/242,428

<151> 2000-10-23

<150> US 60/241,884

<151> 2000-10-20

<150> US 60/241,877

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Arg Lys Ala Ala Thr Phe Leu Glu Asp Val Gln Asn Trp Glu Leu Ala  
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Cys Ala Ser Ala Pro Ala Pro Gly Asn Pro Gln Pro Phe Leu Ser Gln  
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Ala Ala Val Thr Leu Ala Lys Ala Glu Ala Met Ala Phe Leu Gln Glu  
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Gln Trp Lys Leu Phe Glu Met Gln Pro Val Ser Asp Lys Tyr Phe Thr  
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Glu Phe Arg Val Leu Gly Lys Gly Gly Phe Gly Glu Val Cys Ala Val  
195 200 205

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Lys Arg Leu Lys Lys Gly Gly Glu Lys Met Ala Leu Leu Glu Lys  
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Phe Leu Ala Ser Pro Phe Tyr Asp Arg Phe Leu Gln Trp Lys Leu Phe  
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Phe His Ile Tyr Asn Val Gly Thr Arg Gly Leu Ala Met Ser Arg Val  
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Glu Thr Lys Asp Ile Cys Arg Leu Phe Leu Ala Lys Lys Pro Glu Gln  
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Arg Leu Gly Ser Arg Glu Lys Ala Asp Asp Pro Arg Lys His Pro Phe  
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Pro Phe Val Pro Asp Pro Ser Val Val Tyr Ala Lys Asp Val Asp Glu  
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Ile Asp Asp Phe Ser Glu Val Arg Gly Val Glu Phe Asp Asp Lys Asp  
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Gln Glu Glu Ile Ile Glu Thr Gly Leu Phe Glu Glu Leu Asn Asp Pro  
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Arg Leu Phe Arg Asp Phe Leu Ala Asn Thr Pro Glu Phe Lys Leu Ala  
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Glu Lys Gln Pro Ile Ser Asp Lys Tyr Phe Tyr Glu Phe Arg Thr Leu  
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Gly Lys Gly Gly Phe Gly Glu Val Cys Ala Val Gln Val Lys Asn Thr  
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Thr His Leu Cys Leu Val Met Thr Leu Met Asn Gly Gly Asp Leu Lys  
260 265 270

Tyr His Ile Tyr Asn Ile Gly Tyr Asp Gly Lys Gly Val Asp Lys Gly  
275 280 285

Ile Glu Met Lys Arg Ile Ile His Tyr Thr Ala Gln Ile Thr Thr Gly  
290 295 300

Ile Leu His Leu His Asp Met Asp Ile Ile Tyr Arg Asp Met Lys Pro  
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Glu Asn Val Leu Leu Asp Ser Gln Gly Gln Cys Arg Leu Ser Asp Leu  
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Val Tyr Ala Lys Asp Thr Gly Asp Ile Ala Glu Phe Ser Glu Ile Lys  
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Gly Ile Glu Phe Asp Ala Lys Asp Asp Lys Phe Phe Lys Glu Phe Ser  
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Tyr His Ile Tyr Asn Ile Gly Glu Lys Gly Ile Glu Met Glu Arg Ile  
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Ile Tyr Tyr Thr Ala Gln Ile Thr Thr Gly Met Leu Gln Leu His Asn  
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Ser Gln Gly Gln Cys Arg Leu Ser Asp Leu Gly Leu Ala Val Glu Ile  
325 330 335

Pro Val Gly Lys Thr Thr Gln Lys Ala Gly Thr Gly Ala Tyr Met  
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Ala Pro Glu Ile Leu Thr Glu Thr Pro Tyr Arg Thr Ser Val Asp Trp  
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Phe Lys Ser Ile Asn Phe Ala Arg Leu Glu Ala Gly Leu Ile Asp Pro  
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<213> Homo sapiens

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aaggcgccgc ggagacagcc cgggcggggg cctacattcc ccagggcagg catcatgtcg 240  
gcggcgcagg tgtcctcgtc ccggagacaa tcttgctacc tgtgcgacct gccccgcatg 300  
ccctgggcca tgatctggaa cttctcgaa cccgtatgcc gcggttgcgt caactacgag 360

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aacatggctg tataattttg atttttttt aatacattgt gtttctatat ttttttgac	2100
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gattgtgggaa ttggTTTGT ttctgtttt catttacctg tagtgctatt	2940
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tga	3003

<210> 22  
 <211> 564  
 <212> PRT  
 <213> Homo sapiens

<400> 22

Met Ser Ala Ala Gln Val Ser Ser Ser Arg Arg Gln Ser Cys Tyr Leu	
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10	15

Cys Asp Leu Pro Arg Met Pro Trp Ala Met Ile Trp Asp Phe Ser Glu	
20	25
30	

Pro Val Cys Arg Gly Cys Val Asn Tyr Glu Gly Ala Asp Arg Ile Glu	
35	40
45	

Phe Val Ile Glu Thr Ala Arg Gln Leu Lys Arg Ala His Gly Cys Phe	
50	55
60	

Pro Glu Gly Arg Ser Pro Pro Gly Ala Ala Ala Ser Ala Ala Ala Lys  
65 70 75 80

Pro Pro Pro Leu Ser Ala Lys Asp Ile Leu Leu Gln Gln Gln Gln  
85 90 95

Leu Gly His Gly Gly Pro Glu Ala Ala Pro Arg Ala Pro Gln Ala Leu  
100 105 110

Glu Arg Tyr Pro Leu Ala Ala Ala Glu Arg Pro Pro Arg Leu Gly  
115 120 125

Ser Asp Phe Gly Ser Ser Arg Pro Ala Ala Ser Leu Ala Gln Pro Pro  
130 135 140

Thr Pro Gln Pro Pro Pro Val Asn Gly Ile Leu Val Pro Asn Gly Phe  
145 150 155 160

Ser Lys Leu Glu Glu Pro Pro Glu Leu Asn Arg Gln Ser Pro Asn Pro  
165 170 175

Arg Arg Gly His Ala Val Pro Pro Thr Leu Val Pro Leu Met Asn Gly  
180 185 190

Ser Ala Thr Pro Ala Ala Ala Ser Leu Gly Ser Ala Gln Pro Thr Asp  
195 200 205

Leu Gly Ala His Lys Arg Pro Ala Ser Val Ser Ser Ser Ala Ala Val  
210 215 220

Glu His Glu Gln Arg Glu Ala Ala Ala Lys Glu Lys Gln Pro Pro Pro  
225 230 235 240

Pro Ala His Arg Gly Pro Ala Asp Ser Leu Ser Thr Ala Ala Gly Ala  
245 250 255

Ala Glu Leu Ser Ala Glu Gly Ala Gly Lys Ser Arg Gly Ser Gly Glu  
260 265 270

Gln Asp Trp Val Asn Arg Pro Lys Thr Val Arg Asp Thr Leu Leu Ala  
275 280 285

Leu His Gln His Gly His Ser Gly Pro Phe Glu Ser Lys Phe Lys Lys  
290 295 300

Glu Pro Ala Leu Thr Ala Gly Arg Leu Leu Gly Phe Glu Ala Asn Gly  
305 310 315 320

Ala Asn Gly Ser Lys Ala Val Ala Arg Thr Ala Arg Lys Arg Lys Pro  
325 330 335

Ser Pro Glu Pro Glu Gly Glu Val Gly Pro Pro Lys Ile Asn Gly Glu  
340 345 350

Ala Gln Pro Trp Leu Ser Thr Ser Thr Glu Gly Leu Lys Ile Pro Met  
355 360 365

Thr Pro Thr Ser Ser Phe Val Ser Pro Pro Pro Pro Thr Ala Ser Pro  
370 375 380

His Ser Asn Arg Thr Thr Pro Pro Glu Ala Ala Gln Asn Gly Gln Ser  
385 390 395 400

Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser His  
405 410 415

Ala Ser Lys Asp Ala Asn Gln Val His Ser Thr Thr Arg Arg Asn Ser  
420 425 430

Asn Ser Pro Pro Ser Pro Ser Ser Met Asn Gln Arg Arg Leu Gly Pro  
435 440 445

Arg Glu Val Gly Gly Gln Gly Ala Gly Asn Thr Gly Gly Leu Glu Pro  
450 455 460

Val His Pro Ala Ser Leu Pro Asp Ser Ser Leu Ala Thr Ser Ala Pro  
465 470 475 480

Leu Cys Cys Thr Leu Cys His Glu Arg Leu Glu Asp Thr His Phe Val  
485 490 495

Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser Arg  
500 505 510

Gln Ser Ile Lys Gln Gln Gly Ala Ser Gly Glu Val Tyr Cys Pro Ser

515

520

525

Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe Met  
 530 535 540

Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys Lys  
 545 550 555 560

Glu Arg Asp Ser

<210>	23					
<211>	1692					
<212>	DNA					
<213>	Homo sapiens					
<400>	23					
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tacgaggcg	ctgatcgcat	cgaattcgtg	atcgagacag	cgcgcagct	gaagcggcg	180
cacggctg	tcccgaggg	tgcgtcccc	ccggcgccg	cgccctcg	cgccgc	240
ccggccgc	tctccgcca	ggacatcctt	ttgcagcagc	agcagcagct	tggcacggc	300
ggcccccagg	cggcccccgc	cgcgcgcag	gccttggagc	gctaccgtt	ggcgccgcg	360
gccgagaggc	ccccgcgc	cggctctgac	ttcggcagca	gccgcgcgc	agcgagcctg	420
gcccagccgc	cgacgcgc	gccgcgc	gtgaacggca	tcctgg	caacggcttc	480
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gcgggtccgc	ccaccctgg	gccgctcatg	aacggctcg	ccacgcgc	ggccgc	600
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gcggaaagg	cggcaagag	ccgcgggtct	ggagagcagg	actgggtcaa	caggccaa	840
accgtgcgc	acacgctgct	ggcgctgcac	cagcacggcc	actcg	ggcc	900
aagtttaaga	aggagccgc	cctgactgca	ggcaggttgt	tgggtttcga	ggccaacggg	960
gccaacgggt	ctaaagcagt	tgcaagaaca	gcaaggaaaa	ggaagccctc	tccagaacca	1020
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agtggagagg tctattgtcc cagtggggaa aaatgcctc ttgtgggtcc caatgtcccc 1620  
tgggcctta tgcaagggga aattgcaacc atccttgctg gagatgtgaa agtgaaaaaaa 1680  
gagagagact cg 1692

<210> 24  
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<212> DNA  
<213> Homo sapiens

<400> 24  
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<210> 25  
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<212> DNA  
<213> Homo sapiens

<400> 25  
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<210> 26  
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<213> Homo sapiens

<400> 26  
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<210> 27  
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<213> Homo sapiens

<400> 27  
000

<210> 28  
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<212> DNA  
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<400> 28  
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<210> 29  
<211> 0  
<212> DNA  
<213> Homo sapiens

<400> 29  
000

<210> 30  
<211> 0  
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<213> Homo sapiens

<400> 30  
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<210> 31  
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<212> PRT  
<213> Homo sapiens

<400> 31

Met Ser Ala Ala Gln Val Ser Ser Ser Arg Arg Gln Ser Cys Tyr Leu  
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Cys Asp Leu Pro Arg Met Pro Trp Ala Met Ile Trp Asp Phe Ser Glu  
20 25 30

Pro Val Cys Arg Gly Cys Val Asn Tyr Glu Gly Ala Asp Arg Ile Glu  
35 40 45

Phe Val Ile Glu Thr Ala Arg Gln Leu Lys Arg Ala His Gly Cys Phe  
50 55 60

Gln Asp Gly Arg Ser Pro Gly Pro Pro Pro Val Gly Val Lys Thr  
65 70 75 80

Val Ala Leu Ser Ala Lys Glu Ala Ala Ala Ala Ala Ala Ala Ala  
85 90 95

Ala Ala Ala Ala Ala Gln Gln Gln Gln Gln Gln Gln Gln  
100 105 110

Gln Leu  
115 120 125

Asn His Val Asp Gly Ser Ser Lys Pro Ala Val Leu Ala Ala Pro Ser  
130 135 140

Gly Leu Glu Arg Tyr Gly Leu Ser Ala Ala Ala Ala Ala Ala Ala  
145 150 155 160

Ala Ala Ala Ala Val Glu Gln Arg Ser Arg Phe Glu Tyr Pro Pro Pro  
165 170 175

Pro Val Ser Leu Gly Ser Ser His Thr Ala Arg Leu Pro Asn Gly  
180 185 190

Leu Gly Gly Pro Asn Gly Phe Pro Lys Pro Thr Pro Glu Glu Gly Pro  
195 200 205

Pro Glu Leu Asn Arg Gln Ser Pro Asn Ser Ser Ala Ala Ala Ser  
210 215 220

Val Ala Ser Arg Arg Gly Thr His Gly Gly Leu Val Thr Gly Leu Pro  
225 230 235 240

Asn Pro Gly Gly Gly Pro Gln Leu Thr Val Pro Pro Asn Leu  
245 250 255

Leu Pro Gln Thr Leu Leu Asn Gly Pro Ala Ser Ala Ala Val Leu Pro  
260 265 270

Pro Pro Pro Pro His Ala Leu Gly Ser Arg Gly Pro Pro Thr Pro Ala  
275 280 285

Pro Pro Gly Ala Pro Gly Gly Pro Ala Cys Leu Gly Gly Thr Pro Gly  
290 295 300

Val Ser Ala Thr Ser Ser Ala Ser Ser Ser Thr Ser Ser Ser Val  
305 310 315 320

Ala Glu Val Gly Val Gly Ala Gly Gly Lys Arg Pro Gly Ser Val Ser  
325 330 335

Ser Thr Asp Gln Glu Arg Glu Leu Lys Glu Lys Gln Arg Asn Ala Glu

340

345

350

Ala Leu Ala Glu Leu Ser Glu Ser Leu Arg Asn Arg Ala Glu Glu Trp  
 355 360 365

Ala Ser Lys Pro Lys Met Val Arg Asp Thr Leu Leu Thr Leu Ala Gly  
 370 375 380

Cys Thr Pro Tyr Glu Val Arg Phe Lys Lys Asp His Ser Leu Leu Gly  
 385 390 395 400

Arg Val Phe Ala Phe Asp Ala Val Ser Lys Pro Gly Met Asp Tyr Glu  
 405 410 415

Leu Lys Leu Phe Ile Glu Tyr Pro Thr Gly Ser Gly Asn Val Tyr Ser  
 420 425 430

Ser Ala Ser Gly Val Ala Lys Gln Met Tyr Gln Asp Cys Met Lys Asp  
 435 440 445

Phe Gly Arg Gly Leu Ser Ser Gly Phe Lys Tyr Leu Glu Tyr Glu Lys  
 450 455 460

Lys His Gly Ser Gly Asp Trp Arg Leu Leu Gly Asp Leu Leu Pro Glu  
 465 470 475 480

Ala Val Arg Phe Phe Lys Glu Gly Val Pro Gly Ala Asp Met Leu Pro  
 485 490 495

Gln Pro Tyr Leu Asp Ala Ser Cys Pro Met Leu Pro Thr Ala Leu Val  
 500 505 510

Ser Leu Ser Arg Ala Pro Ser Ala Pro Pro Gly Thr Gly Ala Leu Pro  
 515 520 525

Pro Ala Ala Pro Ser Gly Arg Gly Ala Ala Ala Ser Leu Arg Lys Arg  
 530 535 540

Lys Ala Ser Pro Glu Pro Pro Asp Ser Ala Glu Gly Ala Leu Lys Leu  
 545 550 555 560

Gly Glu Glu Gln Gln Arg Gln Gln Trp Met Ala Asn Gln Ser Glu Ala  
 565 570 575

Leu Lys Leu Thr Met Ser Ala Gly Gly Phe Ala Ala Pro Gly His Ala  
580 585 590

Ala Gly Gly Pro Pro Pro Pro Pro Pro Leu Gly Pro His Ser Asn  
595 600 605

Arg Thr Thr Pro Pro Glu Ser Ala Pro Gln Asn Gly Pro Ser Pro Met  
610 615 620

Ala Ala Leu Met Ser Val Ala Asp Thr Leu Gly Thr Ala His Ser Pro  
625 630 635 640

Lys Asp Gly Ser Ser Val His Ser Thr Thr Ala Ser Ala Arg Arg Asn  
645 650 655

Ser Ser Ser Pro Val Ser Pro Ala Ser Val Pro Gly Gln Arg Arg Leu  
660 665 670

Ala Ser Arg Asn Gly Asp Leu Asn Leu Gln Val Ala Pro Pro Pro Pro  
675 680 685

Ser Ala His Pro Gly Met Asp Gln Val His Pro Gln Asn Ile Pro Asp  
690 695 700

Ser Pro Met Ala Asn Ser Gly Pro Leu Cys Cys Thr Ile Cys His Glu  
705 710 715 720

Arg Leu Glu Asp Thr His Phe Val Gln Cys Pro Ser Val Pro Ser His  
725 730 735

Lys Phe Cys Phe Pro Cys Ser Arg Glu Ser Ile Lys Ala Gln Gly Ala  
740 745 750

Thr Gly Glu Val Tyr Cys Pro Ser Gly Glu Lys Cys Pro Leu Val Gly  
755 760 765

Ser Asn Val Pro Trp Ala Phe Met Gln Gly Glu Ile Ala Thr Ile Leu  
770 775 780

Ala Gly Asp Val Lys Val Lys Lys Glu Arg Asp Pro  
785 790 795

<210> 32  
<211> 723  
<212> PRT  
<213> Homo sapiens

<400> 32

Ser His Arg Ile Arg Asp Arg Asp Ser Ala Pro Ala Glu Ala Gly Ala  
1 5 10 15

Arg Leu Leu Pro Gly Arg Pro Leu Pro Arg Ala Ala Ala Ala Ala Gln  
20 25 30

Gln  
35 40 45

Gln Gln Gln Gln Gln Gln Leu Asn His Val Asp Gly Ser Ser Lys Pro  
50 55 60

Ala Val Leu Ala Ala Pro Ser Gly Leu Glu Arg Tyr Gly Leu Ser Ala  
65 70 75 80

Ala Val Glu Gln Arg Ser  
85 90 95

Arg Phe Glu Tyr Pro Pro Pro Pro Val Ser Leu Gly Ser Ser Ser His  
100 105 110

Thr Ala Arg Leu Pro Asn Gly Leu Gly Gly Pro Asn Gly Phe Pro Lys  
115 120 125

Pro Thr Pro Glu Glu Gly Pro Pro Glu Leu Asn Arg Gln Ser Pro Asn  
130 135 140

Ser Ser Ser Ala Ala Ala Ser Val Ala Ser Arg Arg Gly Thr His Gly  
145 150 155 160

Gly Leu Val Thr Gly Leu Pro Asn Pro Gly Gly Gly Gly Pro Gln  
165 170 175

Leu Thr Val Pro Pro Asn Leu Leu Pro Gln Thr Leu Leu Asn Gly Pro  
180 185 190

Ala Ser Ala Ala Val Leu Pro Pro Pro Pro His Ala Leu Gly Ser

195

200

205

Arg Gly Pro Pro Thr Pro Ala Pro Pro Gly Ala Pro Gly Gly Pro Ala  
210 215 220

Cys Leu Gly Gly Thr Pro Gly Val Ser Ala Thr Ser Ser Ser Ala Ser  
225 230 235 240

Ser Ser Thr Ser Ser Val Ala Glu Val Gly Val Gly Ala Gly Gly  
245 250 255

Lys Arg Pro Gly Ser Val Ser Ser Thr Asp Gln Glu Arg Glu Leu Lys  
260 265 270

Glu Lys Gln Arg Asn Ala Glu Ala Leu Ala Glu Leu Ser Glu Ser Leu  
275 280 285

Arg Asn Arg Ala Glu Glu Trp Ala Ser Lys Pro Lys Met Val Arg Asp  
290 295 300

Thr Leu Leu Thr Leu Ala Gly Cys Thr Pro Tyr Glu Val Arg Phe Lys  
305 310 315 320

Lys Asp His Ser Leu Leu Gly Arg Val Phe Ala Phe Asp Ala Val Ser  
325 330 335

Lys Pro Gly Met Asp Tyr Glu Leu Lys Leu Phe Ile Glu Tyr Pro Thr  
340 345 350

Gly Ser Gly Asn Val Tyr Ser Ser Ala Ser Gly Val Ala Lys Gln Met  
355 360 365

Tyr Gln Asp Cys Met Lys Asp Phe Gly Arg Gly Leu Ser Ser Gly Phe  
370 375 380

Lys Tyr Leu Glu Tyr Glu Lys Lys His Gly Ser Gly Asp Trp Arg Leu  
385 390 395 400

Leu Gly Asp Leu Leu Pro Glu Ala Val Arg Phe Phe Lys Glu Gly Val  
405 410 415

Pro Gly Ala Asp Met Leu Pro Gln Pro Tyr Leu Asp Ala Ser Cys Pro  
420 425 430

Met Leu Pro Thr Ala Leu Val Ser Leu Ser Arg Ala Pro Ser Ala Pro  
435 440 445

Pro Gly Thr Gly Ala Leu Pro Pro Ala Ala Pro Ser Gly Arg Gly Ala  
450 455 460

Ala Ala Ser Leu Arg Lys Arg Lys Ala Ser Pro Glu Pro Pro Asp Ser  
465 470 475 480

Ala Glu Gly Ala Leu Lys Leu Gly Glu Glu Gln Gln Arg Gln Gln Trp  
485 490 495

Met Ala Asn Gln Ser Glu Ala Leu Lys Leu Thr Met Ser Ala Gly Gly  
500 505 510

Phe Ala Ala Pro Gly His Ala Ala Gly Gly Pro Pro Pro Pro Pro Pro  
515 520 525

Pro Leu Gly Pro His Ser Asn Arg Thr Thr Pro Pro Glu Ser Ala Pro  
530 535 540

Gln Asn Gly Pro Ser Pro Met Ala Ala Leu Met Ser Val Ala Asp Thr  
545 550 555 560

Leu Gly Thr Ala His Ser Pro Lys Asp Gly Ser Ser Val His Ser Thr  
565 570 575

Thr Ala Ser Ala Arg Arg Asn Ser Ser Ser Pro Val Ser Pro Ala Ser  
580 585 590

Val Pro Gly Gln Arg Arg Leu Ala Ser Arg Asn Gly Asp Leu Asn Leu  
595 600 605

Gln Val Ala Pro Pro Pro Ser Ala His Pro Gly Met Asp Gln Val  
610 615 620

His Pro Gln Asn Ile Pro Asp Ser Pro Met Ala Asn Ser Gly Pro Leu  
625 630 635 640

Cys Cys Thr Ile Cys His Glu Arg Leu Glu Asp Thr His Phe Val Gln  
645 650 655

Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser Arg Glu  
660 665 670

Ser Ile Lys Ala Gln Gly Ala Thr Gly Glu Val Tyr Cys Pro Ser Gly  
675 680 685

Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe Met Gln  
690 695 700

Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys Lys Glu  
705 710 715 720

Arg Asp Pro

<210> 33  
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<400> 33

Val Ala Arg Thr Ala Arg Lys Arg Lys Pro Ser Pro Glu Pro Glu Gly  
1 5 10 15

Glu Val Gly Pro Pro Lys Ile Asn Gly Glu Ala Gln Pro Trp Xaa Ser  
20 25 30

Thr Ser Thr Glu Gly Xaa Lys Ile Pro Met Thr Pro Thr Ser Ser Phe  
35 40 45

Val Ser Pro Pro Pro Pro Thr Ala Ser Pro His Ser Asn Arg Thr Thr  
50 55 60

Pro Pro Glu Ala Ala Gln Asn Gly Gln Ser Pro Met Ala Ala Leu Ile

65

70

75

80

Leu Val Ala Asp Asn Ala Gly Gly Ser His Ala Ser Lys Asp Ala Asn  
85 90 95

Gln Val His Ser Thr Thr Arg Arg Asn Ser Asn Ser Pro Pro Ser Pro  
100 105 110

Ser Ser Met Asn Gln Arg Arg Leu Gly Pro Arg Glu Val Gly Gly Gln  
115 120 125

Gly Ala Gly Asn Thr Gly Gly Leu Glu Pro Val His Pro Ala Ser Leu  
130 135 140

Pro Asp Phe Ser Leu Ala Thr Ser Ala Pro Leu Cys Cys Thr Leu Cys  
145 150 155 160

His Glu Arg Leu Glu Asp Asn His Phe Val Gln Cys  
165 170

<210> 34

<211> 197

<212> PRT

<213> Homo sapiens

<400> 34

Met Thr Pro Thr Ser Ser Phe Val Ser Pro Pro Pro Pro Thr Ala Ser  
1 5 10 15

Pro His Ser Asn Arg Thr Thr Pro Pro Glu Ala Ala Gln Asn Gly Gln  
20 25 30

Ser Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser  
35 40 45

His Ala Ser Lys Asp Ala Asn Gln Val His Ser Thr Thr Arg Arg Asn  
50 55 60

Ser Asn Ser Pro Pro Ser Pro Ser Ser Met Asn Gln Arg Arg Leu Gly  
65 70 75 80

Pro Arg Glu Val Gly Gly Gln Gly Ala Gly Asn Thr Gly Gly Leu Glu  
85 90 95

Pro Val His Pro Ala Ser Leu Pro Asp Ser Ser Leu Ala Thr Ser Ala  
100 105 110

Pro Leu Cys Cys Thr Leu Cys His Glu Arg Leu Glu Asp Thr His Phe  
115 120 125

Val Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser  
130 135 140

Arg Gln Ser Ile Lys Gln Gln Gly Ala Ser Gly Glu Val Tyr Cys Pro  
145 150 155 160

Ser Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe  
165 170 175

Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys  
180 185 190

Lys Glu Arg Asp Ser  
195

<210> 35  
<211> 197  
<212> PRT  
<213> Homo sapiens

<400> 35

Met Thr Pro Thr Ser Ser Phe Val Ser Pro Pro Pro Pro Thr Ala Ser  
1 5 10 15

Pro His Ser Asn Arg Thr Thr Pro Pro Glu Ala Ala Gln Asn Gly Gln  
20 25 30

Ser Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser  
35 40 45

His Ala Ser Lys Asp Ala Asn Gln Val His Ser Thr Thr Arg Arg Asn  
50 55 60

Ser Asn Ser Pro Pro Ser Pro Ser Ser Met Asn Gln Arg Arg Leu Gly  
65 70 75 80

Pro Arg Glu Val Gly Gly Gln Gly Ala Gly Asn Thr Gly Gly Leu Glu

	85	90	95
Pro Val His Pro Ala Ser Leu Pro Asp Ser Ser Leu Ala Thr Ser Ala			
100	105	110	
Pro Leu Cys Cys Thr Leu Cys His Glu Arg Leu Glu Asp Thr His Phe			
115	120	125	
Val Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe Pro Cys Ser			
130	135	140	
Arg Gln Ser Ile Lys Gln Gln Gly Ala Ser Gly Glu Val Tyr Cys Pro			
145	150	155	160
Ser Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro Trp Ala Phe			
165	170	175	
Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val Lys Val Lys			
180	185	190	
Lys Glu Arg Asp Ser			
195			
<210> 36			
<211> 216			
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Pro Pro Pro Pro Pro Leu Gly Pro His Ser Asn Arg Thr Thr Pro			
20	25	30	
Pro Glu Ser Ala Pro Gln Asn Gly Pro Ser Pro Met Ala Ala Leu Met			
35	40	45	
Ser Val Ala Asp Thr Leu Gly Thr Ala His Ser Pro Lys Asp Gly Ser			
50	55	60	
Ser Val His Ser Thr Thr Ala Ser Ala Arg Arg Asn Ser Ser Ser Pro			
65	70	75	80

Val Ser Pro Ala Ser Val Pro Gly Gln Arg Arg Leu Ala Ser Arg Asn  
85 90 95

Gly Asp Leu Asn Leu Gln Val Ala Pro Pro Pro Pro Ser Ala His Pro  
100 105 110

Gly Met Asp Gln Val His Pro Gln Asn Ile Pro Asp Ser Pro Met Ala  
115 120 125

Asn Ser Gly Pro Leu Cys Cys Thr Ile Cys His Glu Arg Leu Glu Asp  
130 135 140

Thr His Phe Val Gln Cys Pro Ser Val Pro Ser His Lys Phe Cys Phe  
145 150 155 160

Pro Cys Ser Arg Glu Ser Ile Lys Ala Gln Gly Ala Thr Gly Glu Val  
165 170 175

Tyr Cys Pro Ser Gly Glu Lys Cys Pro Leu Val Gly Ser Asn Val Pro  
180 185 190

Trp Ala Phe Met Gln Gly Glu Ile Ala Thr Ile Leu Ala Gly Asp Val  
195 200 205

Lys Val Lys Lys Glu Arg Asp Pro  
210 215

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<400> 37  
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ctccctttca	tcatctcagg	gtgtccagca	gccctccatc	tacagcttct	cccaaataac	240
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tcgcatcacc	gccattgtca	atgcctcggt	ggaagtggtc	aacgtattct	tcgagggcat	360
tcagtagata	aaggtgcctg	ttaccgatgc	tcgtgactcg	cgtctctacg	acttttttga	420
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<400> 42

Met Thr Ala Ser Ala Ser Ser Phe Ser Ser Ser Gln Gly Val Gln Gln  
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Pro Ser Ile Tyr Ser Phe Ser Gln Ile Thr Arg Ser Leu Phe Leu Ser  
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Asn Gly Val Ala Ala Asn Asp Lys Leu Leu Leu Ser Ser Asn Arg Ile  
35 40 45

Thr Ala Ile Val Asn Ala Ser Val Glu Val Val Asn Val Phe Phe Glu  
50 55 60

Gly Ile Gln Tyr Ile Lys Val Pro Val Thr Asp Ala Arg Asp Ser Arg  
65 70 75 80

Leu Tyr Asp Phe Phe Asp Pro Ile Ala Asp Leu Ile His Thr Ile Asp  
85 90 95

Met Arg Gln Gly Arg Thr Leu Leu His Cys Met Ala Gly Val Ser Arg  
100 105 110

Ser Ala Ser Leu Cys Leu Ala Tyr Leu Met Lys Tyr His Ser Met Ser  
115 120 125

Leu Leu Asp Ala His Thr Trp Thr Lys Ser Arg Arg Pro Ile Ile Arg  
130 135 140

Pro Asn Asn Gly Phe Trp Glu Gln Leu Ile Asn Tyr Glu Phe Lys Leu  
145 150 155 160

Phe Asn Asn Asn Thr Val Arg Met Ile Asn Ser Pro Val Gly Asn Ile  
165 170 175

Pro Asp Ile Tyr Glu Lys Asp Leu Arg Thr Met Ile Ser Met  
180 185 190

<210> 43

<211> 570

<212> DNA

<213> Homo sapiens

<400> 43

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ctccttctgt	ccagcaatcg	catcaccgccc	attgtcaatg	cctcggtgga	agtggtcaac	180
gtattcttcg	agggcattca	gtacataaag	gtgcctgtta	ccgatgctcg	tgactcgcgt	240
ctctacgact	ttttgaccc	cattgctgat	cttatccaca	ccatcgatat	gaggcagggc	300
cgtacgctgc	tgcactgcat	ggctggagtg	agccgttccg	cctcaactgtg	ccttgcgtac	360
ctcatgaaat	accactccat	gtcgctgctg	gacgcccata	catggaccaa	gtcgccgcgc	420
cccatcatcc	ggcccaacaa	cggcttttgg	gaacagctca	tcaattacga	attcaagctg	480
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<211> 190

<212> PRT

<213> Homo sapiens

<400> 44

Met	Thr	Ala	Ser	Ala	Ser	Ser	Phe	Ser	Ser	Ser	Gln	Gly	Val	Gln	Gln
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1							5								

Pro	Ser	Ile	Tyr	Ser	Phe	Ser	Gln	Ile	Thr	Arg	Ser	Leu	Phe	Leu	Ser
															30
								20							

Asn	Gly	Val	Ala	Ala	Asn	Asp	Lys	Leu	Leu	Leu	Ser	Ser	Asn	Arg	Ile
															45
							35								

Thr	Ala	Ile	Val	Asn	Ala	Ser	Val	Glu	Val	Val	Asn	Val	Phe	Phe	Glu
							50								
								55							

Gly	Ile	Gln	Tyr	Ile	Lys	Val	Pro	Val	Thr	Asp	Ala	Arg	Asp	Ser	Arg
															80
							65								
								70							

Leu	Tyr	Asp	Phe	Phe	Asp	Pro	Ile	Ala	Asp	Leu	Ile	His	Thr	Ile	Asp
								85							
									90						

Met	Arg	Gln	Gly	Arg	Thr	Leu	Leu	His	Cys	Met	Ala	Gly	Val	Ser	Arg
															110
								100							
									105						

Ser	Ala	Ser	Leu	Cys	Leu	Ala	Tyr	Leu	Met	Lys	Tyr	His	Ser	Met	Ser
									115						
										120					
											125				

Leu Leu Asp Ala His Thr Trp Thr Lys Ser Arg Arg Pro Ile Ile Arg  
130 135 140

Pro Asn Asn Gly Phe Trp Glu Gln Leu Ile Asn Tyr Glu Phe Lys Leu  
145 150 155 160

Phe Asn Asn Asn Thr Val Arg Met Ile Asn Ser Pro Val Gly Asn Ile  
165 170 175

Pro Asp Ile Tyr Glu Lys Asp Leu Arg Met Met Ile Ser Met  
180 185 190